Mars 2020 – General Dynamics Visit
August 21, 2018

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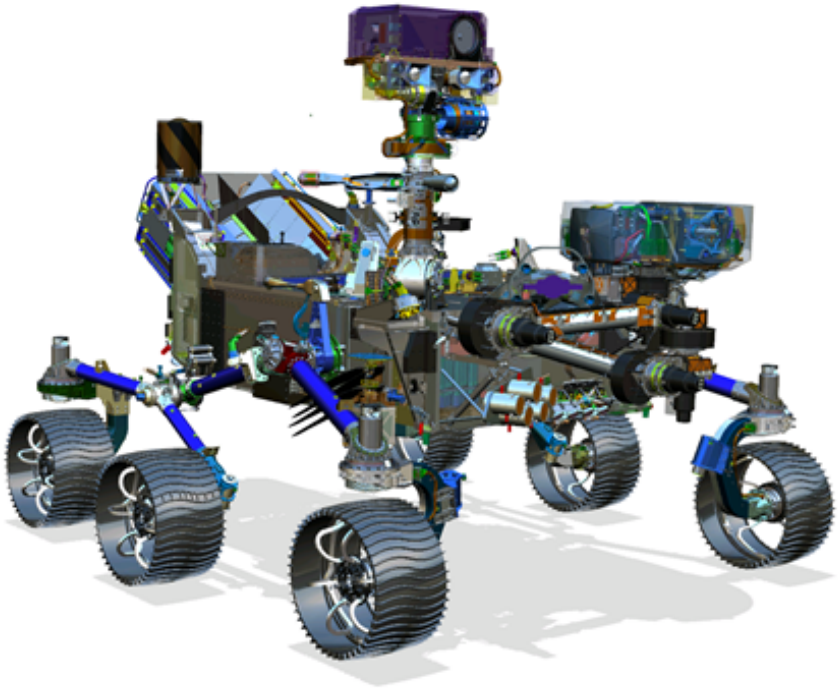
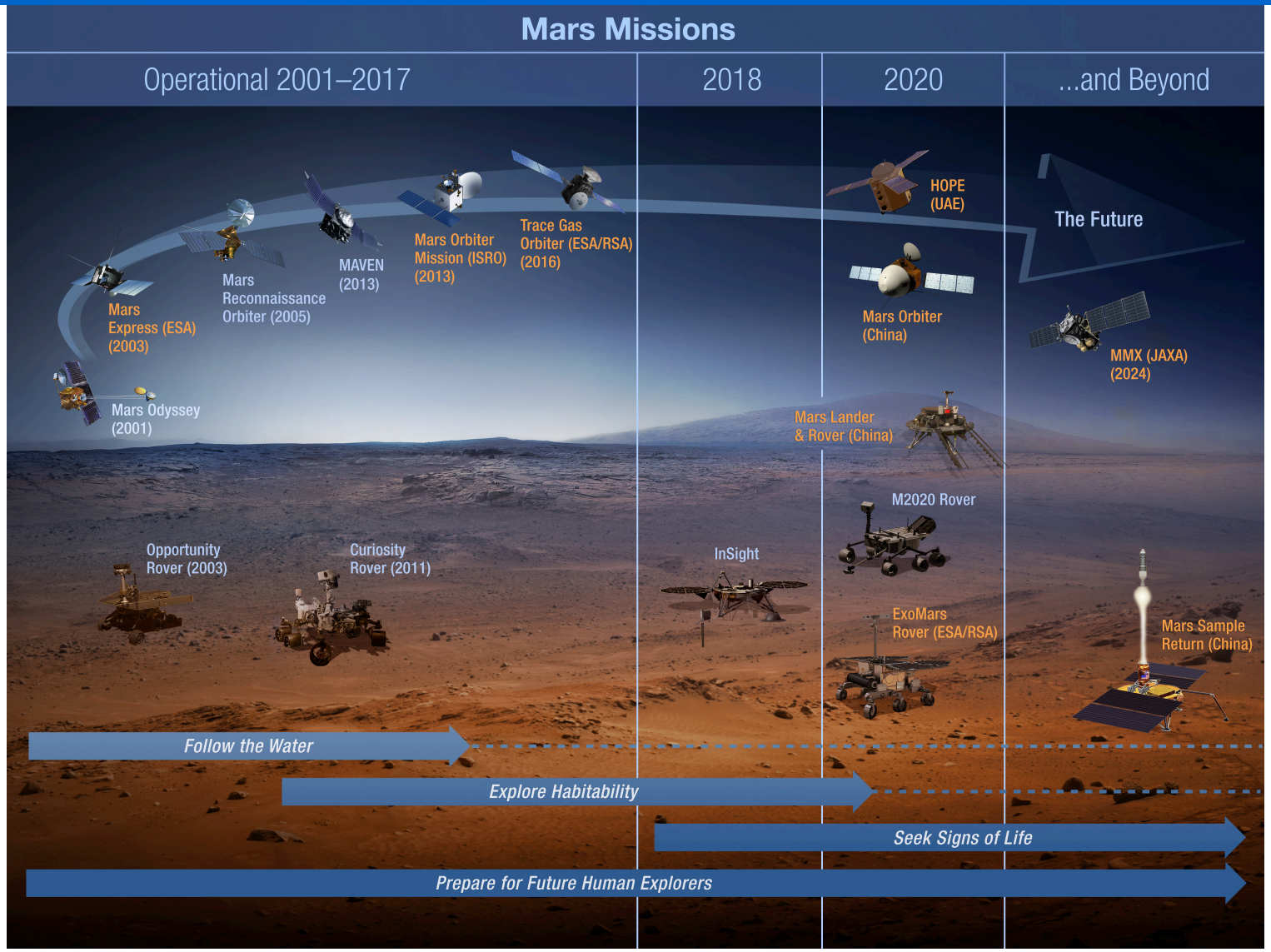
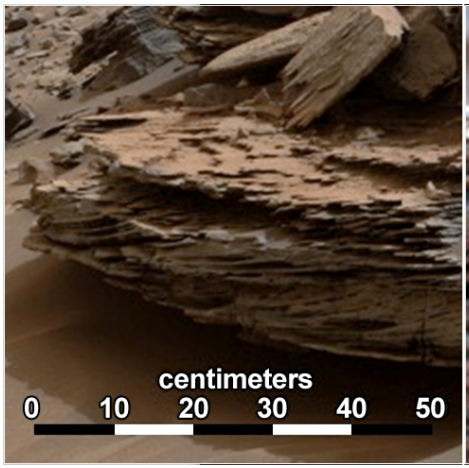
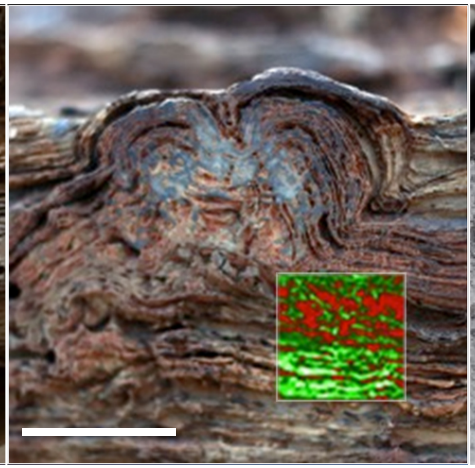


Current and Future Mars Missions



Mars 2020 Mission Objectives





GEOLOGY

- Explore an ancient environment on Mars
- Understand processes of formation and alteration

ASTROBIOLOGY

- Assess habitability of ancient environment
- Seek evidence of past life
- Select sampling locations with high biosignature preservation potential

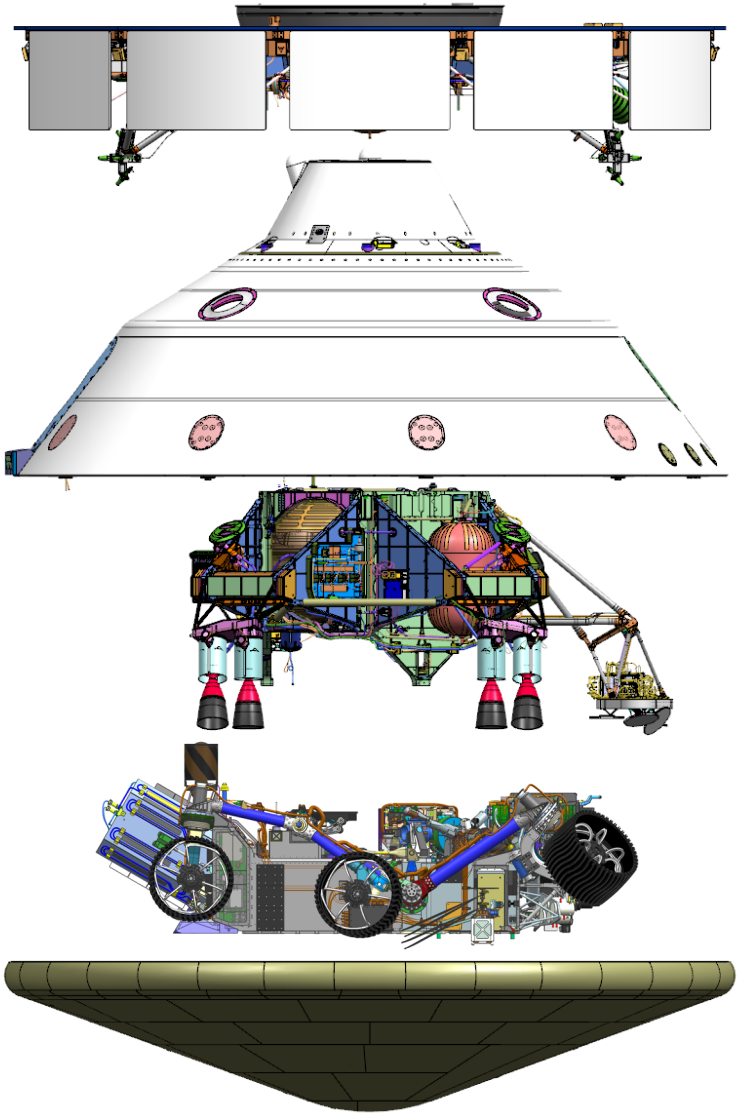
SAMPLING

- Capability to collect ~40 samples and blanks, 20 in prime mission
- Include geologic diversity
- Deposit samples on the surface for possible return

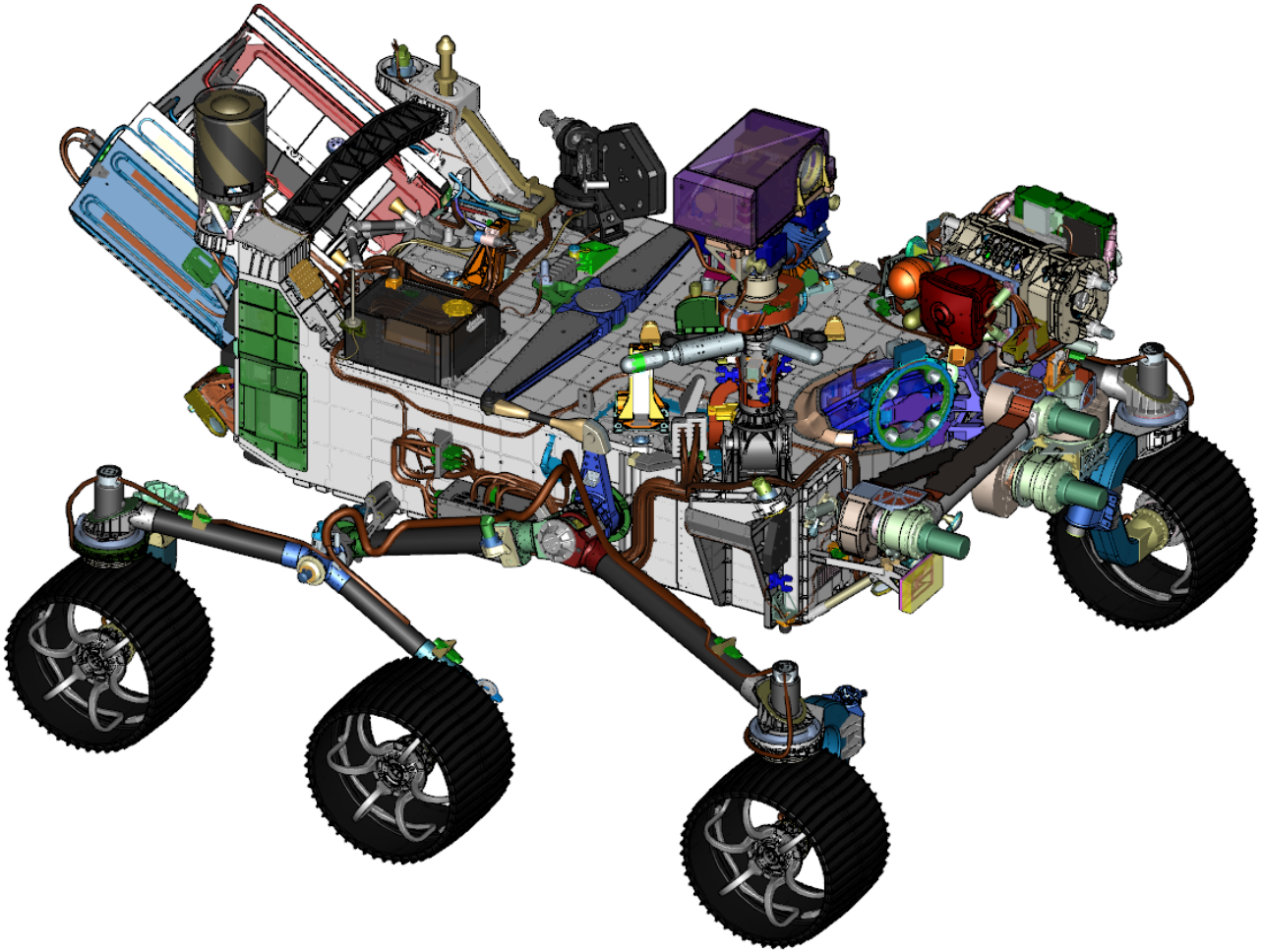
PREPARE FOR HUMANS

- Measure temperature, humidity, wind, and dust environment
- Demonstrate In Situ Resource Utilization by converting atmospheric CO_2 to O_2

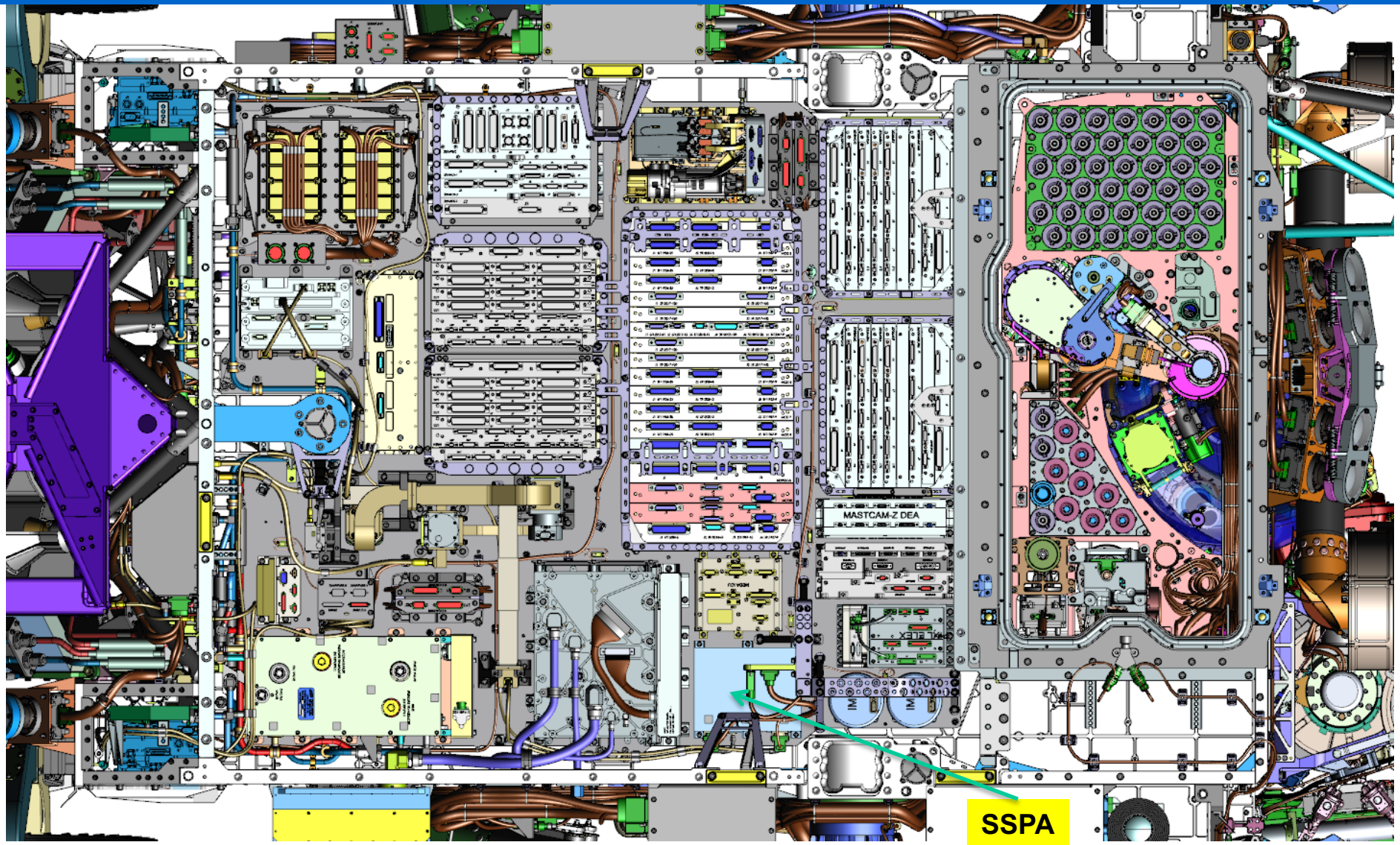
Mars 2020 Spacecraft



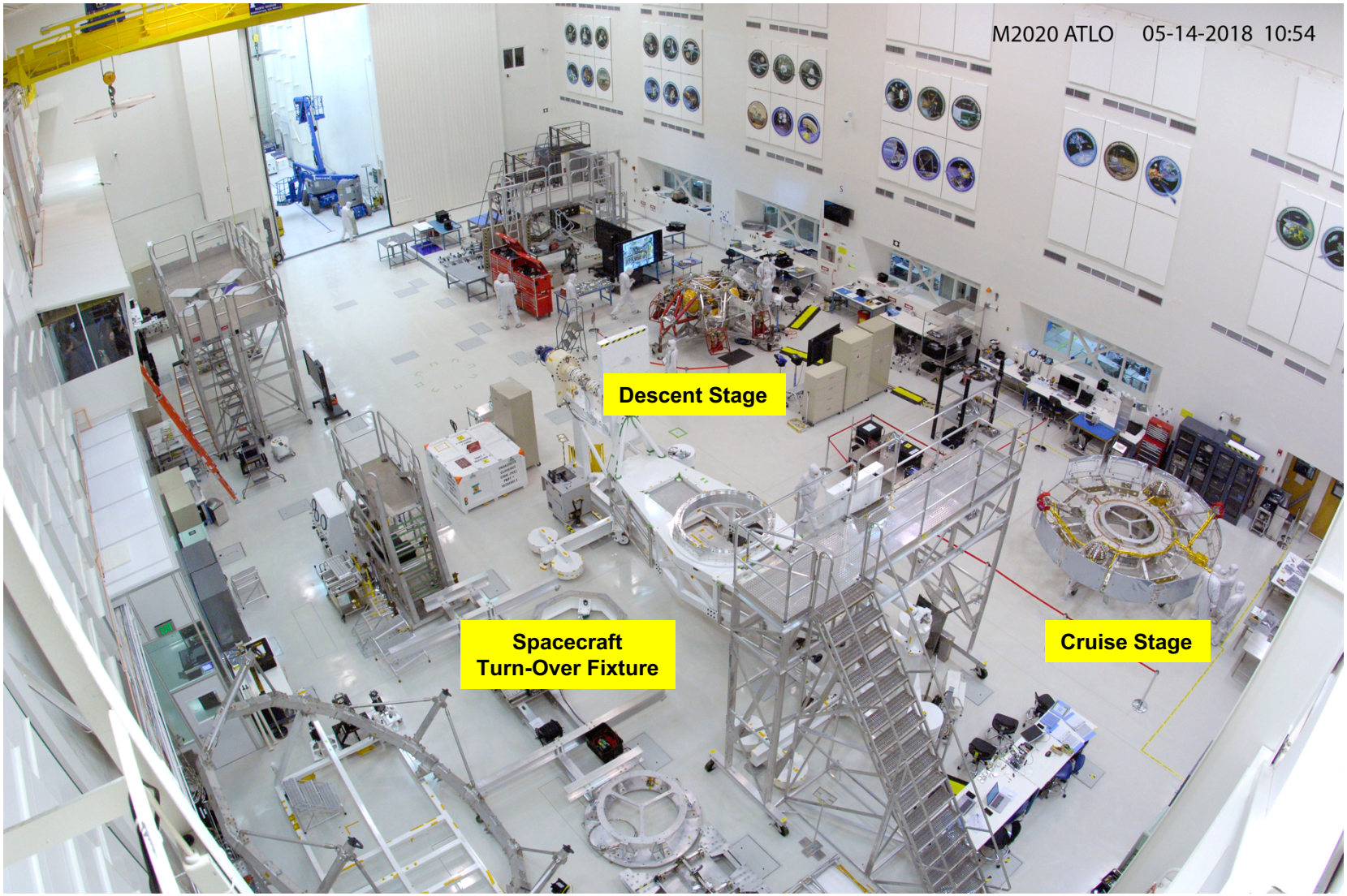
Mars 2020 Rover



Mars 2020 Rover Belly Electronics



Mars 2020 ATLO Floor



Rover Round Wire Harness Fabrication on Mock-Up

Rover Flex Harness